

**UNION  
CARBIDE**

EMPLOYEE RELATIONS DEPARTMENT

DEC 06 1984

*George Parker*

*[Handwritten mark]*

UNION CARBIDE CORPORATION OLD RIDGEBURY ROAD DANBURY CT 06817

November 17, 1984

State of New York Department of Labor  
Division of Safety and Health  
Two World Trade Center  
New York, New York 10047

Attention: Mr. George Kasyk  
Radiological Health Unit  
Room 6989

Re: Request to Amend Radioactive Materials  
License No. 210-0090

Dear Mr. Kasyk:

Umetco Minerals Corporation ("Umetco") hereby requests that the New York State Department of Labor (the "Department") give its consent to the transfer of Radioactive Materials License No. 210-0090 (the "License") from Union Carbide to Umetco by amending the License to name Umetco as the licensee.

Union Carbide is in the process of reorganizing its metals business and has transferred ownership and control of its Niagara Falls, New York Facility, at which the material subject to the above-referenced License is authorized to be used, to Umetco. Umetco, a Delaware corporation is a wholly-owned subsidiary of Union Carbide authorized to do business in the State of New York and having its principal place of business at Old Ridgebury Road, Danbury, Connecticut 06817.

Umetco further requests that the Department continue to waive the financial security requirements as permitted pursuant to 12 NYCRR 38.7 (c).

By separate letter, Umetco is requesting that the License be amended to name Mr. R. J. Klotzbach as Radiation Safety Officer. With the exception of this change and the change in identity of the owner of the radioactive material subject to the License, Umetco and Union Carbide stipulate that no other term or condition specified in the License shall change as a result of the transfer to Umetco. The same material shall be used as authorized under the current License.

Upon approval of the License amendment, please send notice of the approval to Mr. Robert J. Klotzbach, Director, Technology, Umetco Minerals Corporation, P. O. Box 579, 4625 Royal Avenue, Niagara Falls, New York 14302. If you need additional infor-

UCCNHT0003675

mation, please telephone Mr. Klotzbach at 716-278-3157 or write him at the above address.

By: W. G. Alesio  
W. G. Alesio  
Vice President  
Umetco Minerals Corporation

CLD

By: J. H. Field  
J. H. Field  
Executive Vice President  
Union Carbide Corporation

CLD

CLD jem

Enclosure Union Carbide Annual Report

bcc. R. G. Beverly/R. Miller  
R. J. Klotzbach  
G. Parker

# Umetco Minerals Corporation



PO BOX 66 137 47th STREET • NIAGARA FALLS NEW YORK 14302

November 12, 1984

Mr. Andrew E. Awa  
State of New York - Department of Labor  
Division of Safety and Health  
Room 6989  
Two World Trade Center  
New York, New York 10047

Subject. Designated Site Radiation Safety Officer Change -  
Radioactive Material License No. 955-0139, Installation LR-0139

Dear Mr. Awa:

In the last year, Mr. David R. Brosnahan has left our employment. Under previous license renewals, David was listed as our Radiation Safety Officer for this source. We are now appointing Mr. R. J. Klotzbach (resume attached) to replace Mr. Brosnahan as our R. S. O. for this license. Given Mr. Klotzbach's broad range of experience in radiation matters, we believe he is highly qualified to fill the position. We would appreciate a reply from your office if you find Mr. Klotzbach's credentials acceptable.

A letter under separate cover will be forwarded to your office this week from our Danbury, Connecticut offices covering our Licenses name change (Condition 1) per our discussion last week. Also under separate cover will be a request for renewal of this license for an additional year (Condition 4), this letter due out by the weekend from our office.

Very truly yours,

George P. Parker  
Superintendent of Services

GPP ac  
Attachment

UCCNHT0003677

October 29, 1984

NAME: Robert James Klotzbach

AGE: 62      DATE OF BIRTH: August 27, 1922

ADDRESS: 5140 Dana Drive, Lewiston, NY

TELEPHONE: 716-278-3157 - Business  
716-297-4848 - Home

EDUCATION: B.S. Chemistry, Fordham University, 1943  
Army Specialized Training Chemical Engineering,  
New York University, 1944

PRESENT OCCUPATION: Director Technology  
Umetco Minerals Corporation  
Niagara Falls, NY 14302

Member of Union Carbide Corporation Technology  
Committee, 1973 to Present

REPORTS TO: Vice President, Umetco Minerals Corporation

ACCOUNTABILITY: R&D, specifically uranium, vanadium, tungsten, molybdenum,  
copper, and chromium for domestic operations and foreign  
plants in South Africa and Brazil

Engineering including foreign and domestic ferroalloy and  
minerals business areas

Maximum Operating Budget \$9,000,000

Maximum Capital Budget \$40,000,000

SUPPLEMENTAL BIOGRAPHICAL DATA: Who's Who in America 1972-Present  
American Men and Women of Science 1956  
Who's Who in Atoms, 5th Edition

MEMBERSHIPS: Niagara Frontier Research Directors Association  
American Association for the Advancement of Science  
Society for the Preservation, Unification, and Redevelopment of  
Niagara

Niagara Falls Country Club

0135k

UCCNHT0003678

EXPERIENCE:

1984 , Director of Technology, Umetco Minerals Corporation

1975-1983 Director of Technology, Metals Division, Union Carbide Corporation, Niagara Falls, NY - Reports to Vice President

Direct research, development, quality control, and engineering of mills, smelters, and plant additions processing uranium, vanadium, tungsten, molybdenum, copper, asbestos, silicon, manganese, chromium, coal, calcium carbide, and other minerals for domestic and foreign operations in 1975-1978 period. Manage Niagara Falls site for maximum of 280 people, providing analytical, mineralogy and metallographic services on a division-wide basis.

Specific Results: Process development design and construction of

1. Electric furnace charge chrome plant, Tubatse, South Africa.
2. 300 tons/day tungsten concentrate gravity mill, Boca de Lage, Brazil.
3. 1000 tons/day tungsten concentrate flotation mill, Tempiute, Nevada.
4. Uranium in-situ ion exchange yellow cake plant, Palangana, Texas.
5. Uranium heap leach solution mining, ion exchange yellow cake plant, Craig, Colorado.
6. Uranium heap leach solution mining, ion exchange yellow cake plant, Gas Hills, Wyoming.
7. 1200 tons/day vanadium magnetic concentrate roast, leach, precipitation mill, Brits, South Africa.
8. New technology vanadium carbide and vanadium nitride production facility, Bon Accord, South Africa
9. Aqueous waste treatment facility for vanadium effluents at Hot Springs, Arkansas; ferroalloy and electrolytic effluents at Marietta, Ohio; and ferroalloy furnace effluents, Ashtabula, Ohio and Sheffield, Alabama.
10. Manganese oxygen reduction facility, Marietta, Ohio.
11. Rebuild of manganese furnace, Beauharnois, Canada.

- 1975-1983  
(Continued)
12. Develop and produce new vanadium carbide-tungsten carbide hardfacing products.
  13. Develop and produce proprietary asbestos products used as plastic fillers and drilling muds.
  14. Designed and built columbium concentrate pilot plant, West Congo, Africa

1973-1975      Director of Technology, Mining and Metals Division, Niagara Falls, NY  
- Reported to President

Directed research, development, new product development, quality control, and engineering activities for Union Carbide's domestic and foreign mining operations and related mill processes and products

1968-1973      Director of Engineering, Mining and Metals Division, Niagara Falls, NY  
- Reported to General Manager

1965-1968      Manager of Process Engineering, Mining and Metals Division, Niagara Falls, NY  
- Reported to Director of Engineering

1965-1973 Specific Results

- 1    Designed and constructed vanadium solvent extraction circuit, Uravan, Colorado
- 2    Design and construction of 1700 tons/day vanadium roast, leach, solvent extraction crystallization vanadium and oxide reduction mill, Hot Springs, Arkansas.
3.   Design and installation of 120 tons/day sodium sulfate crystallization system, Bishop, California.
- 4    Design and installation of 10,000 gallons/day tungsten mine effluent flocculator treatment facility, Bishop, California
- 5    Designed and installed 1000 tons/day tungsten crushing, grinding, and flotation mill expansion, Bishop, California.
- 6    Developed new products and designed and constructed new facility producing manganese-aluminum; chromium-aluminum, and ferroaluminum hardeners for the aluminum industry
- 7    Designed and installed wet and dry fume collectors on electric furnaces, Niagara Falls, New York; Marietta, Ohio; and Alloy, West Virginia.

1965-1968  
(Continued)

8. Design and installation of tungsten metal production facility, Niagara Falls, New York
9. Design and construction of tungsten blue oxide facility, Bishop, California.

1960-1965

Manager of Engineering, Nuclear Division, Tuxedo, NY - Reported to Vice President

Specific Results

1. Design and construction of uranium leach, ion exchange yellow cake mill, Gas Hills, Wyoming.
2. Design of new technology asbestos mill, King City, California.
3. Process development design and construction of ammonium paratungstate production facility, Bishop, California.
4. Design and installation of  $V_2O_3$  facility, Rifle, Colorado.
5. Design and installation of sulfuric acid plant, Uravan, Colorado.
6. Design and installation of uranium hot leach facility, Uravan, Colorado
7. Design and construction of 1000 tons/day uranium acid leach, ion exchange precipitation and roasting mill, Gas Hills, Wyoming
8. Designed 500 tons/day vanadium roast, leach, and precipitation mill, Bon Accord, South Africa
9. Design and construction of deep sea cassiterite dredge for Thailand tin smelter
10. Design and construction of reverberatory furnaces for tin smelter, Phuket, Thailand
11. Chairman of Union Carbide Corporation Reactor Safeguards Committee supervising and monitoring all reactor experiments, radiopharmaceutical production techniques and shipments
12. Design and construction of bulk sulfide roast, molybdenum metal, and electrolytic copper plants, Bishop, California
13. Consultant for Linde Division, Union Carbide Corporation, on installation of cryogenic loop in NASA Plumbrook reactor.

1960-1965  
(Continued)

14. Responsible for Union Carbide's rejection of New York State proposal to build power reactor fuel reprocessing facility in West Valley, New York.
15. Designed irradiated Polyox Van de Graaf facility, Bound Brook, New Jersey.
16. Designed and constructed uranium lignite kiln, North Dakota.
17. Designed and constructed prototype of truck mounted radon gas bore hole analyzer for exploration.

1955-1960

Manager of Engineering, Nuclear Division, New York, NY -  
Reported to General Manager

Specific Results

1. Designed Union Carbide's radioactive materials laboratory, Tuxedo, New York.
2. Project engineer for Pennsylvania Advanced Reactor project, a homogeneous reactor joint venture of Union Carbide, Pennsylvania Power and Light, and Westinghouse
3. Prepared Union Carbide's Reactor Hazards Report for AEC licensing.
4. Calculated all shielding requirements for Union Carbide Corporation reactor and hot laboratory.
5. Started up and redesigned large sections of Rifle, Colorado, uranium mill including roasting, leaching, quenching, off-gas and materials handling
6. Design and constructed neutron diffraction device for Union Carbide Corporation reactor.
7. Nuclear consultant for Union Carbide Development Company, Linde and Chemicals & Plastics Divisions.
8. Designed nuclear energy exhibit for lobby of Union Carbide Corporation, 270 Park Avenue office building

1953-1955

Chairman, Long-Range Planning Chemical Technology, Oak Ridge  
National Laboratory, Oak Ridge, Tennessee - Reported to Division  
Director

Accountable for data evaluation, future programming, and advanced studies related to chemical processing technology connected with the Aqueous Homogeneous Reactor Program, thorium irradiation, Uranium-233 production, fission product utilization, aircraft reactor experiment, fused salt reactors and liquid metal reactor

1953-1955  
(Continued) experiment. Oak Ridge representative at Bookhaven National Laboratory on 3-year liquid metal fuel reactor design with Babcock and Wilcox. Participated in studies related to Uranium-235 loading of Savannah River reactors and Hanford reactors. Worked with Nobel Prize winner, Eugene Wigner, on chemical processing study HOPE.

1949-1953 Senior Engineer, Oak Ridge National Laboratory, Oak Ridge, Tennessee - Reported to Division Director

Design engineer for process, tankage, piping, and criticality control for irradiated Uranium-235 from MTR, SIR, and STA fuel elements which is the only currently operating facility in the United States at Arco, Idaho.

Resident engineer at Foster Wheeler Corporation, New York, New York, who were architect engineers for Arco plant (1949-1950).

Resident Engineer at Arco (1950-1953) for plant construction and start-up.

1947-1949 Associate Engineer, Oak Ridge National Laboratory - Reported to Section Chief, Reactor Division

1. Designed, constructed, and started up the first Uranium-233, protactinium, irradiated thorium solvent extraction facility.
2. Designed and constructed Uranyl Ammonium Phosphate pilot facility for irradiated uranium.

1946-1947 Junior Engineer, Clinton Laboratories, Technical Division, Oak Ridge, Tennessee - Reported to Section Chief, Reactor Division

Engaged in semi-works operation and bench testing of solvent extraction processes for Uranium-233 and plutonium.

1945-1946 U.S. Army, Manhattan District, Clinton Laboratories, Oak Ridge, Tennessee - Reported to Section Chief, Chemistry Division

Engaged in chemical separations production of radioactive lanthanum and uranium REDOX solvent extraction plutonium-uranium process development.

1944-1945 U.S. Army, Manhattan District, Linde Air Products, Tonawanda, New York - Reported to Senior Engineer

Engaged in pilot development of gaseous diffusion plant barrier sheet which was successful and went into production for fabrication at K-25 Oak Ridge.